urban areas that cannot be serviced are unsuitable for concentrated development. If they are used at all, they should be devoted to nonstructural uses.

There are two major factors to consider when planning an installation or extension of a sewerage system: the area to be served by the system and the population density. The sewers that make up the system should serve a natural drainage area. Gravity flow sewer lines which follow the slope of the land and the natural drainage channels are more efficient to operate than systems which require pumping stations. The primary drainage system in the planning area is illustrated in Figure 7.

The size of the population living in the area is the second factor that must be considered in planning a sewage collection and disposal system. The design capacity of the system depends upon the population served. The design of most systems is based on an estimate of the future population and water use and the type of development that will probably take place in the area during a minimum time span of twenty-five years.

A public sewerage system has been found to be the only thoroughly satisfactory way to handle the collection and treatment of waste in an urban area. Therefore, all residential, commercial, and industrial development should be tied into a reliable sewerage system. Although septic tanks are sometimes used in substandard developments, they are rural facilities which should not be relied on for sewage disposal in urban subdivisions. Public health officials recommend that a community sewerage system should serve areas where the population is more than one family per acre. However, this depends upon the soil and upon topographic and drainage characteristics of the area.

In the Tri-City area there are four individual networks for the collection of sewage and one sewage treatment and disposal plant. Several residential areas, both inside and outside municipal boundaries, are dependent upon septic tank disposal systems. Figure 7 shows the parts of the Planning Area that are served by public sewerage systems.

## LEAKSVILLE

The Leaksville sanitary sewerage collection system has been designed and expanded as the incorporated area has been enlarged. Most of the system is laid out to follow the natural grade of the topography; however, it has been necessary to install one pumping station to serve part of the northwestern section of town. The lift station, located on Matrimony Creek near Clark Avenue, pumps sewage through a force main, which runs along